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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/359,809	07/23/99	LEVY	R 01064.0011-0

EXAMINER	
MEDLEY, M	
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DATE MAILED: 07/05/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

1- File Copy

PTO-90C (Rev.11/00)

Office Action Summary

Application No.	Applicant(s)
09/359809	LEVY
Examiner	**Group Art Unit**
MEDLEY	1714

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE Three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication .
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

☒ Responsive to communication(s) filed on 5/03/01.

☐ This action is **FINAL.**

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle,* 1935 C.D. 1 1; 453 O.G. 213.

Disposition of Claims

☒ Claim(s) 1 and 57-71 is/are pending in the application.

Of the above claim(s)____ is/are withdrawn from consideration.

☐ Claim(s)____ is/are allowed.

☒ Claim(s) 1 and 57-71 is/are rejected.

☐ Claim(s)____ is/are objected to.

☐ Claim(s)____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The proposed drawing correction, filed on____ is ☐ approved ☐ disapproved.

☐ The drawing(s) filed on____ is/are objected to by the Examiner.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 11 9(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number)____.

☐ received in this national stage application from the International Bureau (PCT Rule 1 7.2(a)).

*Certified copies not received:____.

Attachment(s)

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s).____

☒ Interview Summary, PTO-413

☒ Notice of Reference(s) Cited, PTO-892

☐ Notice of Informal Patent Application, PTO-152

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Other____

Office Action Summary

DETAILED ACTION

In a telephonic interview, followed by a fax copy of the said telephonic interview, on April 27, 2001, applicants representative was informed that the restriction requirement made in Paper No. 7 dated November 6, 2000, would be withdrawn and an office action on the merits will follow immediately.

Applicant is required to update the status of the parent application mentioned on page 1 of the instant application.

Claim 62 is objected to because of the following informalities: In line 3, the comma "," should be deleted after "hydrocarbon" to be consistent with page 28, lines 11-12 and the original claims of record . Appropriate correction is required.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. The step for "prior to or after exposing the superabsorbent polymer, SAP, to water or high humidity environment, 80% R.H., in the form of a powder, flakes or granules, and mixing the lubricant in a conventional mixer wherein the said lubricant is entrapped by or is taken up by the SAP that has been swollen with water or in high humidity" is critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976).

The disclosure in the last three paragraph of page 31demonstrates that said particular process steps features were considered essential by the applicant, not reflected in the claims which are rejected

Claims 57-71 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. The step for "prior to or after exposing the superabsorbent polymer, SAP, to water or high humidity environment, 80% R.H., in the form of a powder, flakes or granules, an mixing the lubricant in a conventional mixer wherein the said lubricant is entrapped by ons taken up by the SAP that has been swollen with water or in high humidity" critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). .

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 62-66 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 62 is indefinite for the comma "," appearing in line 3 between "hydrocarbon" and "wax" which is described in the instant application and originally filed claims as one component, and not as two separate and distinct components. Claim 63 is indefinite for "friction is water" which lack support from claim 62 directed "solid organic lubricant". Claim 64 is indefinite for

"friction is an oil or greases thereof and water" which lack support from claim 63 directed only to water. Claim 65 (and dependent claim 66) is indefinite for "friction is a solid lubricant and water" which is a solid lubricant and water "which lack support from claim 63 directed only to water. In the interest of compact prosecution claims 63, 64 and 65 (and dependent claim 66) will be treated on the merits as from claim 57. Applicant is required to clarify the record as to the proper dependency of claims 63, 64 and 65 (and dependent claim 66).

Claim 63 recites the limitation "friction is water" in line 6. There is insufficient antecedent basis for this limitation in the claim.

Claim 64 recites the limitation "friction is an oil or greases there of and water" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 65 and (dependent claim 66) recites the limitation "friction is a solid lubricant and water" in line 2

. There is insufficient antecedent basis for this limitation in the claim.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Hopkins, Jr. et al 5,362,788 combined with The Merck Index and Admitted Prior Art.

Hopkins teach a process for preparing a composition comprising a matrix of cellulose acetate, glycerine and a superabsorbent polymer, SAP, e.g., SANWET(R) which is a starched grafted polyacrylate sodium salt that has the capacity to absorb as much as 800 times its own weight inn liquid, note Example 1, claims 1-3, abstract, and column 1, line 29 to column 2, lines 1-33. The Merck Index is relied on as a teaching reference that glycerine has lubricant properties and have been conventional used as a lubricant which inherently reduces friction, note #4347, Glycerol, glycerine, for its use at page 644. Applicant make admission on record that their superabsorbent polymers are those of Brannon-Peppas, note the paragraph bridging pages 24-25 of the instant application. Brannon-Peppas teaches various known superabsorbent polymers and their chemical and physical properties including the ability to absorb greater than 100 times its weight in water. Patentee also teaches conventional well-known superabsorent polymers that are commerically available, note particularly page 245. Claim 1 is anticipated by the teachings of Hopkins combined with the teachings of the Merck Index and the Admitted Prior Art.

Claim 1, 57, 63, 69 and 70 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Admitted Prior Art, Levy 4,985,251combined with Brannon-Pappas.

Applicant makes admission on recor that pior art Levy 4,985,251 combined with Brannon-Pappas disclosed on pages 24-25 of the instant application, superabsorbent polymers are their claimed superabsorbent polymers, note Levy '251 at column 18 for Example 1 for teaching a process for preparing a composition, and a composition comprising water, SuperSorb(R), a polymer that absorbs greater than 100 times its weight in water and Arosurf(R) MSF, (fatty acid

esters, ethers and alcohols), that functions as a film forming agent, as a surfactant emulsifier, or as an insecticidal, note column 17, lines 42-54. Applicant make admission on record that their superabsorbent polymers are those of Brannon-Peppas, not e the paragraph bridging pages 24-25 of the instant application. Brannon-Peppas teaches various known superabsorbent polymers and their chemical and physical properties including the ability to absorb greater than 100 times its weight in water. Patentee also teaches conventional well-known superabsorent polymers that are commerically available, note particularly page 245. The composition and process for producing said composition comprising a SAP, water and a film forming additive or surfactant of Levy '251 combined with Brannon-Peppas anticipates the claimed composition and process of making when used as a lubricant composition which would inherently reduce friction because water, a universal well-known lubricant, reduces friction.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 57, 63-64, and 69-71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sayad et al 3,336, 225 combined with admitted prior in view of Hopkins, Jr. 5,362,766 et al and Geursen et al WO93/182,263 and its US counterpart US5,534,304.

Sayad et al teach a method and lubricant composition for reducing friction comprising an aqueous solution of fatty acid soaps, polyacrylamide polymers or copolymers, acrylic acid and

salts thereof and additional additives including antifoaming agents, wetting agents, coupling agents (solubilizing agents), antimicrobial agents, corrosion inhibitors, pH buffers or controls, and the like, note in the entirety, especially column 1, lines 28 to column 2, lines 1-46, Examples I-III, Tables I-III, column 4, line 59-end and claims 1-13.

Applicant's instant claims differ from the claims of the prior art in that applicant explixictly requires that the SAP absorbs greater than about 100 times it weights in water except for the SAP of claim 1. It is the Examiner's position that it would be obvious to artisan in the art to use SAP that absorbs greater than 100 times it weight in waters in view of the admitted prior art and Hopkins, Jr., et al.

Applicants make admission on record in the instant application at page 4 first full paragraph and the paragraph bridging pages 24-25 that the Levy Patents 4,983,389 and 4,985,251; Takeda et al Patents 4,525,527;and 4,612,250 Mikita et al Patents 4,552,938; 4,618,631; 4,654,393 and 4,703,067; Alexander et al 4,677,174; Brannon-Peppas, Absorbent Polymer Technology, 1990; and Buchholz et al Superabsorbent Polymers, Science and Technology, 1994 ACS teach a number of SAP comprising acrylic acid, an acrylic ester, acrylonitrile, acrylamide, co-polymers thereof or mixtures thereof, that absorbs greater than about 100 times its weight in water. Patentee Levy '251 further teaches compositios and process for making said compositions comprising water, SuperSorb(R), that absorbs greater than 100 times it weight in water and Arosurf(R) MSF (fatty acid esters, ethers and alcohols), that functions as a film forming agent or surfactant or emulsifier or an insecticidal, note column 17 lines 42-54. Hopkins

teaches a composition and a process for making comprising a matrix of cellulose acetate, glycerine and a superabsorbent polymer, SAP, e.g., SANWET(R) which is a starched grafted polyacrylate sodium salt that has the capacity to absorb as much as 800 times its own weight in liquid, note Example 1, claims 1-3, abstract, and column 1, line 29 to column 2, lines 1-33. Geursen et al teach and disclose water-in-oil emulsion , note page 5, lines 23-24, comprising superabsorbent polymers, note page 6, line 5-end and provide for the inclusion of lubricants and other conventional additives, note page 7, line 6 to , page 8, lines 1-17 and page 16, line 25 to page 17, line 1-12.

Applicant make admission on record that their superabsorbent polymers are those of Brannon-Peppas, note the paragraph bridging pages 24-25 of the instant application. Brannon-Peppas teaches various known superabsorbent polymers and their chemical and physical properties including the ability to absorb greater than 100 times its weight in water. Patentee also teaches conventional well-known superabsorent polymers that are commerically available, note particularly page 245. It would been obvious to the artisan in the art to substitute the SAP of the secondary references for the polymers of the primary reference for the same intended function to absorb greater than 100 times it weight in water.

Claims 58-62 and 65-68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sayad et al 3,336, 225 combined with admitted prior in view of Hopkins, Jr., et al 5,362,766 and Geursen et al WO/93182,263 and its US conterpart 5,534,304 as applied to claims 1, 57, 63-64 and 69-71 are above, and further in view of Schey and Booser.

Applicants further claim material for reducing friction selected from petroleum lubricant or grease thereof, and optionally a lubricative additive (claim 58); an inorganic solid lubricant and optionally a lubricative additvie (claim 59); specific inorganic solid lubricant of claim 59 (claim 60) note Schey for said teachings, pages 149, 164-169, 433, 493, 500, 501; solid organic lubricant and optionally a lubricant additive (claim 61); specific solid organic lubricant and optionally a lubricant additive (claim 62), note Schey for said teachings, pages 149 and 164-165; solid lubricant and water and a lubricant additive (claim 65); specific solid lubricant and water and a lubricant additive of claim 65 (claim 68), note Schey for said teachings, pages 149, 164-174, 433-435, 500-501; phosphate friction modifiers and optionally a lubricant (claim 67); specific phosphates of claims 67 (claim 68) notepage 495 of Schey for said teachings.

The secondary references Schey teaches various well-known lubricants and friction additives conventionally used in metalworking for friction, lubrication and wear properties including the synthetic and hydrocarbon oils, and greases thereof, waters, solid lubricants (organic and inorganic alone or mixtures thereof), phosphates, soap, water with solids or oils or greases thereof, fatty oils, acids or waxes thereof with other conventionally lubricant additives, note pages 179, 431-436, 465-470 and 487-503. Booser teaches conventional and well-known lubricants and friction additives for moving surfaces, note pages 47-56, 269, 301-314, 329,333, 525 and 529-530.

It would be obvious to the artisan working in the lubricant art to use the lubricants, friction additives and lubricant additives of the secondary references as the lubricants, friction

additives and lubricant additives of the primary references because combining two or more material disclosed by the prior art for the same intened purpose to form a third material that is to be used for the same purpose has been held to be a prima facie case of obviousness, See In re Kerkhoven, 205 USPQ 1069.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CAR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CAR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 57-71 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 29-43 of copending Application No. 09/357,957. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant compositions comprises the same components as the product by process composition comprising the components of related application 09/357,957 and therefore the composition are not patentable distinct.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Application/Control Number: 09/359,809

Art Unit: 1714

The prior art from the parent application have been reviewed and reconsidered. The prior art cited but not applied further teach lubricants, friction additives and lubricants of the same nature as claimed by Applicants.

Any inquiry concerning this communication should be directed to Margaret B. Medley at telephone number (703) 308-2518.

MARGARET MEDLEY
PRIMARY EXAMINER

M.B. Medley/dh

May 30, 2001